

Chapter XIII

Identifying New Virtual Competencies for the Digital Age: Essential Tools for Entry Level Workers

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ABSTRACT

This chapter focuses on the identification of a range of competencies that entry level workers, and thus graduating students, will need to acquire to be successful in the 21st Century of work. While core or basic competencies will still form the prerequisite generic skills that all entry level workers must demonstrate, as the first year progresses, depending on the field in which they are employed, they will be asked to utilise self management, entrepreneurial, and virtual competencies in order to maintain their employment status. Even if they have ICT skills, they will need to have the knowledge and ability in social software, as well as the ability to communicate across the Web, in order to succeed in the digital age. Other attributes, such as cross cultural and professional skills, along with an appreciation of Web ontologies will facilitate entry-level workers as they move into the world of international liaisons.

OVERVIEW

This chapter deals with the interface between education and the workplace by focusing on entry level worker requirements. It emphasizes the

imperative for life long learning, in that digital attributes need be garnered through academic learning and throughout life by individuals mastering a range of tools, languages and processes. The chapter will address the need for teaching

institutions to engage in training about digital competencies for the global workplace to ensure a better equipped and competitive workforce.

A review will be undertaken of the field of research and practice in the domains of what has been known as basic, key and core competencies, along with virtual and enterprise and cross cultural competencies. These competencies will be elaborated and assumptions about their underlying structure examined. This platform will then provide the springboard for the elaboration of the domain of digital competencies that are required across the world to enable more satisfactory communication via social software. Samples of policies from different countries (such as Norway and Singapore), programs and projects promoting a range of digital competencies, will be included.

BACKGROUND

Social software facilitates a number of actions within Virtual learning environments: creating, sharing and collaborating. According to Time Magazine (2006/2007), social software empowers people to: (i) make it; (ii) name it; (iii) work on it; and (iv) find it. The net generation swims through social software and becomes frustrated in school and university systems without appropriate resources and adequately trained teachers who can speak their language and engage with them in learning by breaking through the new digital divide. Teachers need sufficient knowledge to pick the right software for different activities and occasions. Later in the chapter, we return to the move to upgrade teacher education.

Social software can be “defined as a range of Web-based software programs that allow users to interact and share data with other users.” (Wikipedia: http://en.wikipedia.org/wiki/Social_software). According to McLoughlin and Lee (2007, p. 666) “Social software tools such as blogs, wikis, social networking sites, media sharing applications and social bookmarking

utilities are also pedagogical tools that stem from their affordances of sharing, communication and information discovery. An affordance is an action that an individual can potentially perform in their environment by using a particular tool (Affordance, 2007).” Social software tools include: virtual conferencing; blogs; wikis; podcasting; moblogging; photo publishing; digital stories; and social bookmarking (Australian Flexible Learning Systems, 2007).

The type of virtual and digital competencies that are needed in the engagement with the social software environments include additional specialist competencies that are framed around human interaction and technology. However, an individual cannot engage in digital communities without a wide array of competency domains that might not be readily identifiable to those who have not been involved in discerning and enumerating, and then ascertaining the importance of such knowledge, skills and abilities (KSAs) with Web technicians, employers, teachers, students, guidance officers, and entry level workers. In other words, there are KSAs that underpin success in the digital world of work, and without careful delineation of such underlying KSAs (known in educational fields in the UK and Australia as competencies), it is not appropriate to speak of digital competencies as if they were stand alone “attributes”.

Individuals will not be of wider value to the organisation which employs them, without being able to display a range of other key, core, generic, virtual and professional competencies. In the 1990’s, Gow (Gow, 1992; 1994; 1995a, b; Gow & Chant, 1998) tracked grade 12 students into the workforce, and found that as they progressed from being new recruits to more experienced recruits, the “high flier” recruits were distinguished from the “middle of the road” recruits, in that the former were more highly achievement orientated and had better networking skills than the latter. In the oft-predicted virtual work scenario, networking skills will be critical for survival. This is generally not a skill taught in formal education, except where

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